WHAT IS CLAIMED IS:

1. A color reproduction system comprising:

a color image input section; and

a color correcting section for correcting colors

5   of an image of a subject obtained by photographing the

subject by the color image input section, wherein

the color correcting section corrects colors by

changing over a plurality of color correction

parameters according to a subject image signal from the

10   color image input section.

2. A color reproduction system according to

claim 1, wherein

the color correcting section comprises:

an object recognizing section for dividing a

15   subject image input from the color image input section

into images of a plurality of areas, and selecting a

suitable input profile from among a plurality of input

profiles for each divided area;

a device-independent color converting section for

20   converting an image of each area into a device-

independent color image by using the input profile

selected from among the plurality of input profiles;

an image combining section for combining the

device-independent color images converted at divided

25   areas into one device-independent color image; and

a device value image converting section for

converting the combined device-independent color image

into an output device value image by using a
predetermined output profile.

3. A color reproduction system according to
claim 1, wherein the color correcting section has a
5 plurality of input/output profiles prepared by
integrating input profiles and output profiles together,
and comprises:

an object recognizing section for dividing an
input subject image into images of a plurality of areas,
10 and selecting a suitable input/output profile from
among the plurality of input/output profiles for each
divided area;

a device value image converting section for
converting an image of each area into a device value
15 image by using the input/output profile selected from
among the plurality of input/output profiles; and

an image combining section for combining the
device value images converted at divided areas into one
device value image.

20 4. A color reproduction system according to
claim 1, further comprising:

an object recognizing section for dividing a
subject image data including information necessary for
preparing a plurality of input profiles into images of
25 a plurality of areas, and selecting suitable subject
characteristic information from among a plurality of
pieces of subject characteristic information for each

divided area;

a format converting section for converting a format based on selected subject characteristic information and outputting image data capable of

5   changing illumination by areas;

a device-independent color converting section for calculating an input profile from the illumination-variable image data, selecting a suitable input profile from among the plurality of input profiles based on the

10   calculated input profile, and converting the image in each area into a device-independent color image by using the selected input profile;

an image combining section for combining the device-independent color images converted at divided

15   areas into one device-independent color image; and

a device value image converting section for converting the combined device-independent color image into an output device value image by using a predetermined output profile.

20   5. A color reproduction system according to claim 1, further comprising:

an area dividing section for dividing an input image into images of a plurality of areas;

a device-independent color converting section for

25   converting the image in each divided area into a device-independent color image by using the plurality of input profiles in parallel;

a conversion result selecting section for
selecting a device-independent color image for each
area by comparing the plurality of converted device-
independent color images;

5   an image combining section for converting the
device-independent color images selected at divided
areas into one device-independent color image; and

a device value image converting section for
converting the combined device-independent color image

10   into an output device value image by using a
predetermined output profile.

6.   A color reproduction system according to
claim 1, further comprising:

an area dividing section for dividing an input

15   image into images of a plurality of areas;

a first device-independent color converting
section for converting the image in each divided area
into a device-independent color image by using one
input profile;

20   a second device-independent color converting
section for converting the input image in each divided
area into a device-independent color image by using an
input profile selected from among a plurality of input
profiles for each area based on a result of the

25   conversion in the first device-independent color
converting section;

an image combining section for converting the

device-independent color images converted at divided areas into one device-independent color image; and

a device value image converting section for converting the combined device-independent color image into an output device value image by using a predetermined output profile.

7. A color reproduction system according to claim 1, further comprising:

an area dividing section for dividing an input image into images of a plurality of areas;

a first device-independent color converting section for converting the image in each divided area into a device-independent color image by using one input profile;

a spectral reflectance database for storing information on spectral reflectances of a plurality of objects;

a conversion result judging section for judging a result of the conversion at the first device-independent color converting section by referring to the spectral reflectance database;

a subject characteristic information calculating section for calculating subject characteristic information by selecting information in the spectral reflectance database based on a result of the decision by the conversion result judging section;

a second device-independent color converting

section for converting the input image in each divided area into a device-independent color image by using an input profile selected from among a plurality of input profiles prepared based on the subject characteristic

5   information calculated by the subject characteristic information calculating section;

an image combining section for converting the device-independent color images converted at divided areas into one device-independent color image; and

10   a device value image converting section for converting the combined device-independent color image into an output device value image by using a predetermined output profile.

8.   A color reproduction system according to

15   claim 1, further comprising:

an object recognizing section for selecting an input profile to be used from among a plurality of input profiles based on signal values of images obtained by photographing a plurality of color charts

20   of known spectral reflectances;

a device-independent color converting section for converting an image of each area into a device-independent color image by using the input profile selected from among the plurality of input profiles;

25   an image combining section for combining the device-independent color images converted at divided areas into one device-independent color image; and

a device value image converting section for converting the combined device-independent color image into an output device value image by using a predetermined output profile.

5   9.   A color reproduction system according to claim 1, further comprising:

a spectral reflectance database having spectral reflectances of color charts;

a subject characteristic calculating section for

10   calculating subject characteristic information from a color-chart photographic image based on signal values of images obtained by photographing a plurality of color charts of known spectral reflectances and data of the spectral reflectance database;

15   an object recognizing section for dividing a subject photographic image into images of a plurality of areas, and selecting an input profile to be used from among a plurality of input profiles based on the calculated subject characteristic information;

20   a device-independent color converting section for converting an image of each area into a device-independent color image by using the input profile selected from among the plurality of input profiles;

an image combining section for combining the

25   device-independent color images converted at divided areas into one device-independent color image; and

a device value image converting section for

converting the combined device-independent color image into an output device value image by using a predetermined output profile.

10. A color reproduction system according to claim 2, wherein the input profile is prepared based on at least one of image input unit information that includes photographic characteristics of an image input unit used for the photographing and information on a set state of the color image input section, observation illumination light information, and subject characteristic information that represents statistical characteristics of spectral reflectances of the photographed subject.

11. A color reproduction system according to claim 1, wherein

the color correcting section comprises a color estimating section for estimating tristimulus values of the subject under an observation illumination light, based on subject photographic signals obtained by photographing the subject by the color image input section, spectral sensitivity of the color image input section, color matching functions, a spectrum of photographic illumination light, a spectrum of observation illumination light and statistical data of spectral reflectances of the subject, and

the color estimating section uses the statistical data which is changed over according to the subject

photographic signals.

12. A color reproduction system according to claim 1, wherein

the color correcting section comprises a color estimating section for estimating tristimulus values of the subject under an observation illumination light, based on object photographic signals obtained by photographing a plurality of objects of known spectral reflectances by the color image input section, subject photographic signals obtained by photographing the subject by the color image input section, color matching functions, a spectrum of observation illumination light and statistical data of spectral reflectances of the subject, and

the color estimating section uses the statistical data which is changed over according to the subject photographic signals.

13. A color reproduction system according to claim 11, wherein the color estimating section uses the statistical data which is changed over based on a relationship between spectral reflectance data for calculating statistics of spectral reflectances and the subject photographic signals.

14. A color reproduction system according to claim 12, wherein the color estimating section uses the statistical data which is changed over based on a relationship between spectral reflectance data for

calculating statistics of spectral reflectances and the subject photographic signals.

15. A color reproduction system according to claim 12, wherein the color estimating section changes over the statistical data based on a relationship between spectral reflectance data for calculating statistics of spectral reflectances of the subject obtained from a relationship between the object photographic signals and spectral reflectances of the objects, and the subject photographic signals.